Maxwell Steele

msteele1@uw.edu | linkedin.com/in/maxwell-steele | github.com/max-steele | max-steele.digital

EDUCATION

University of Washington

Bachelor of Science in Computer Science | 3.91 GPA

Seattle, WA

- Relevant Coursework: Data Structures & Parallelism, Software Design & Implementation, Database Management Systems, Hardware/Software Interface, Algorithms, Foundations of Computing 1 & 2 (Discrete Math & Probability), Linear Algebra
- Honors: 5x Quarterly Dean's List, 3x Washington Award for Technical Excellence

EXPERIENCE

Software Engineer Intern

Expected Graduation: June 2026

Sept. 2024 – Present

Pacific Northwest National Laboratory (PNNL)

Seattle, WA

- Web Development: Developed sponsored React web applications for federal government agencies with a focus on AI/ML integration in the <u>Foundational Data Science</u> group at PNNL.
- Data Visualization: Created interactive data visualization tools using TypeScript and Airbnb's Visx library for BERTopic-based topic modeling with the goal of extracting insights from large volumes of scientific literature.
- ML Pipelines: Improved a core NLP analytic to include seasonal decomposition/classification of time series data using Theil-Sen regressors and permutation testing. Utilized Docker and AWS EC2 for testing and deployment.
- Professional Development: Collaborated with UI/UX, DevOps, software engineering, and data science teams to meet sponsor needs. Presented live demos, contributed to technical project reports, and authored a comprehensive user guide for the product.

Software Engineer Intern | Department of Homeland Security

June 2024 – Aug. 2024

Pacific Northwest National Laboratory (PNNL)

Richland, WA

- National Security Initiatives: Contributed User Interface development for scientific web interfaces as part of the <u>DHS-WIRED</u> national security program at PNNL.
- Search Interface: Created search and filtering tools to query and display results of an NLP pipeline with React, GraphQL, and data visualization grammars including the pyLDAvis Python library.
- API Development: Developed a RESTful API using Flask, Python, and AWS S3 to efficiently process and cache dense text corpora, vectorizers, and Latent Dirichlet Allocation (LDA) models on a cloud-based architecture.
- Independent Research: Authored a technical abstract and project report detailing contributions and concepts used within the project. Delivered a formal presentation at PNNL's Gold Experience Research Symposium.

Peer Mentor Sept. 2022 – June 2023

Washington State University GEAR-UP

Kennewick, WA

- Aided students in completing scholarship and financial aid applications.
- Organized and administered college tours for freshman and sophomore cohorts (50+ participants).
- Mentored students in applying to universities including the University of Washington and WSU.

Sept. 2021 – June 2023

Washington State University GEAR-UP

Kennewick, WA

- Supported 100+ students weekly with high school curriculum coursework.
- Provided daily STEM and career-focused lessons with individualized approaches for underrepresented students.
- Increased retention in school-wide GEAR-UP programs by 30% by collaborating with program faculty.

Projects

Automated E-Commerce Photo Editor | MERN, React, TypeScript, Node.js

• Developed a React webapp using the MERN stack and Pixo's image editing API to automate photography editing for online retail marketplaces. Increased personal sell through rates by 20% through automated filter application.

Personal Portfolio | Next.js, React, TypeScript, HTML/CSS, Framer Motion, Vercel

TECHNICAL SKILLS

Student Tutor

Languages: JavaScript/TypeScript, Python, Java, C, HTML/CSS

Frameworks & Build Tools: React, Node, Flask, NumPy, Pandas, Visx, GraphQL, Docker

Technologies: Git, GitLab, Jupyter, Linux, Bash, AWS, LaTeX